

AMENDMENTS TO THE CLAIMS

Please Amend Claim 20 and 37.

Claims 1 – 19 (Cancelled)

20. (Currently Amended) An isolated nucleic acid molecule comprising a polynucleotide sequence selected from the group consisting of:

(a) an isolated polynucleotide encoding a polypeptide corresponding to amino acids 1 to 431 of SEQ ID NO:4 including the start codon;

(b) an isolated polynucleotide encoding a polypeptide corresponding to amino acids 2 to 431 of SEQ ID NO:4 minus the start codon;

(c) an isolated polynucleotide encoding a polypeptide corresponding to amino acids 192 to 207 of SEQ ID NO:4;

(d) an isolated polynucleotide encoding the HGRA4sv polypeptide as encoded by the cDNA clone contained in ATCC Deposit No: PTA-2966;

(e) an isolated polynucleotide encoding at least 225 contiguous amino acids of SEQ ID NO:4, wherein said encoded polypeptide has glycine receptor activity; and

(f) an isolated polynucleotide which represents the ~~complimentary~~ complementary sequence (~~antisense~~) of (a), (b), (c), (d), or (e), ~~or fragment thereof~~.

21. (Previously Presented) The isolated nucleic acid molecule of claim 20, wherein said polynucleotide is (a).

22. (Previously Presented) The isolated nucleic acid molecule of claim 21, wherein said polynucleotide comprises nucleotides 1 to 1293 of SEQ ID NO:3.

23. (Previously Presented) The isolated nucleic acid molecule of claim 20, wherein said polynucleotide is (b).

24. (Previously Presented) The isolated nucleic acid molecule of claim 23, wherein said polynucleotide comprises nucleotides 4 to 1293 of SEQ ID NO:3.

25. (Previously Presented) The isolated nucleic acid molecule of claim 20, wherein said polynucleotide is (c).

26. (Previously Presented) The isolated nucleic acid molecule of claim 25, wherein said polynucleotide comprises nucleotides 574 to 621 of SEQ ID NO:3.

27. (Previously Presented) The isolated nucleic acid molecule of claim 20, wherein said polynucleotide is (d).

28. (Previously Presented) The isolated nucleic acid molecule of claim 20, wherein said polynucleotide is (e).

29. (Previously Presented) The isolated nucleic acid molecule of claim 28, wherein said polynucleotide comprises at least 675 contiguous nucleotides of SEQ ID NO:3.

30. (Previously Presented) The isolated nucleic acid molecule of claim 20, wherein said polynucleotide is (f).

31. (Previously Presented) A recombinant vector comprising the isolated nucleic acid molecule of claim 20.

32. (Previously Presented) A recombinant host cell comprising the vector sequences of claim 31.

33. (Previously Presented) A method of making an isolated polypeptide comprising:
(a) culturing the recombinant host cell of claim 32 under conditions such that said polypeptide is expressed; and
(b) recovering said polypeptide.

34. (Previously Presented) The isolated polynucleotide of claim 20 wherein said nucleic acid sequence further comprises a heterologous nucleic acid sequence.

35. (Previously Presented) The isolated polynucleotide of claim 34 wherein said heterologous nucleic acid sequence encodes a heterologous polypeptide.

36. (Previously Presented) The isolated polynucleotide of claim 35 wherein said heterologous polypeptide is the Fc domain of an immunoglobulin.

37. (Currently Amended) An isolated nucleic acid molecule comprising a polynucleotide having a nucleotide sequence at least 97.0% identical to a sequence provided in claim 20, wherein percent identity is calculated using a CLUSTALW global sequence alignment using the following parameters: Matrix=IUB, k-tuple=1, Number of Top Diagonals=5, Gap Penalty=3, Gap Open Penalty 10, Gap Extension Penalty=0.1, Scoring Method=Percent, Window Size=5, wherein said polynucleotide further encodes a polypeptide having glycine receptor activity.

38. (Previously Presented) The isolated polynucleotide of claim 37 wherein said nucleic acid sequence further comprises a heterologous nucleic acid sequence.

39. (Previously Presented) The isolated polynucleotide of claim 38 wherein said heterologous nucleic acid sequence encodes a heterologous polypeptide.

40. (Previously Presented) The isolated polynucleotide of claim 39 wherein said heterologous polypeptide is the Fc domain of an immunoglobulin.